Final Project

Fall 2015

Due date: 2016/1/20

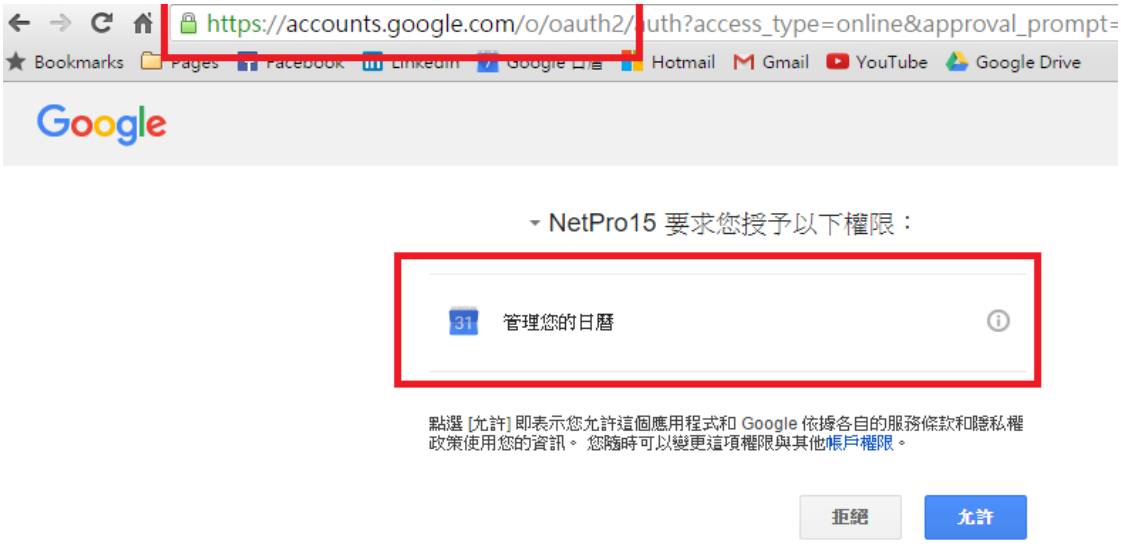
Google Calendar manager

In final project, you need to build a web service to managing users' Google Calendars.

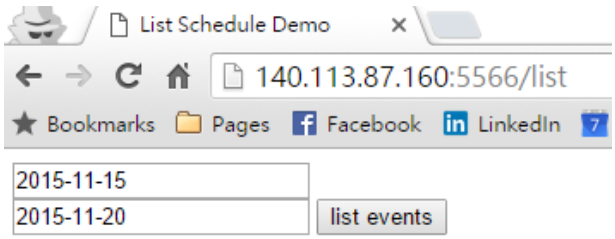
Requirements

- **Basic**
  - Basic requirements are that you need to build **3 web pages** to show 3 different functionalities and **manipulate them only by browser**.
    - And you need to **use cookie to cache users' information and can't show them on web pages' URL**.
  - **Authorization and authentication**
    - In this page, users can authorize your service to access their google calendar. You need to get users' access token and store it.
    - The requirement of this page is to **show OAuth2.0 consent screen and get permission of managing users' google calendars**.
    - E.g.
      - Step1. The web page. Enter your google mail address and click botton.

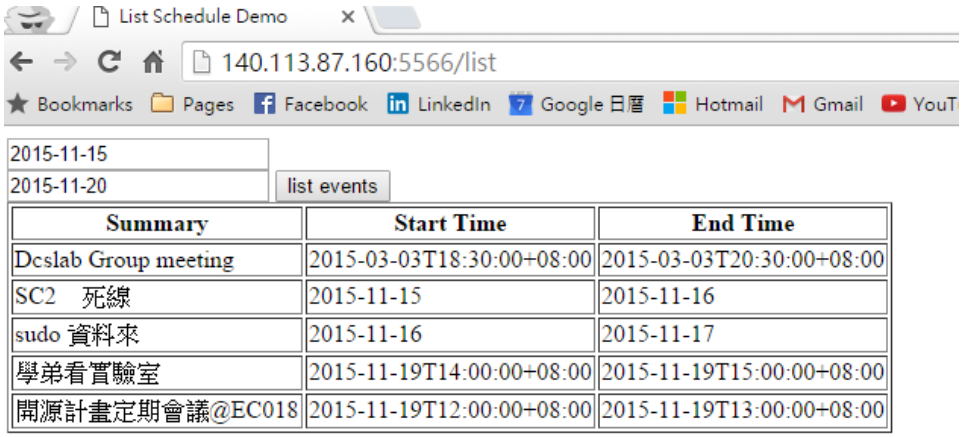
      - Step2. After clicking, turn the network domain to Auth consent screen for authorization.



- **Querying schedules**
  - In this page, users can query their schedules from their google calendars by specifying time range.
  - The requirement of this page is to **show users' events on their google calendars by specifying time range**.
  - Show them as a table including summary, start date, and end date.
  - E.g.
    - Step1. The web page. Enter specifying time range and click button.

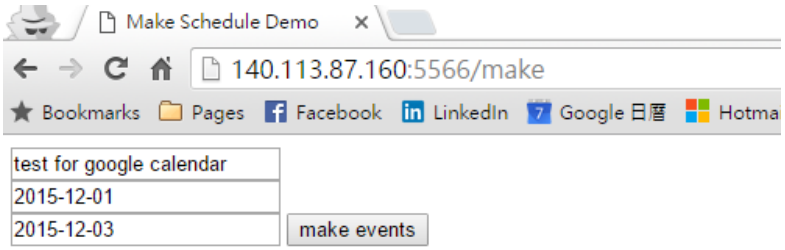


    - Step2. Show results as a table.

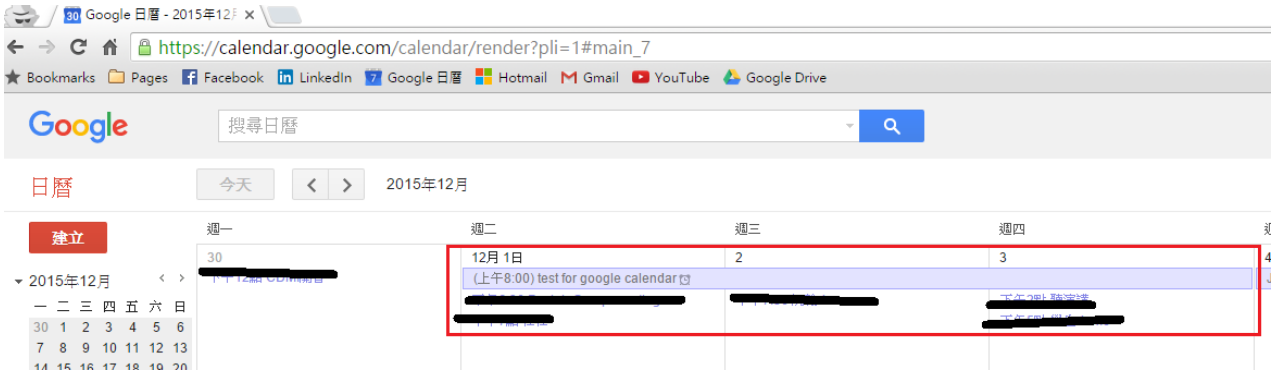


Summary	Start Time	End Time
Dcslab Group meeting	2015-03-03T18:30:00+08:00	2015-03-03T20:30:00+08:00
SC2　死線	2015-11-15	2015-11-16
sudo 資料來	2015-11-16	2015-11-17
學弟看實驗室	2015-11-19T14:00:00+08:00	2015-11-19T15:00:00+08:00
開源計畫定期會議@EC018	2015-11-19T12:00:00+08:00	2015-11-19T13:00:00+08:00

- **Making events**
  - In this page, users can insert an event into their google calendars.
  - The requirement of this page is to **make an event and show it on users' google calendars**.
  - E.g.
    - Step1. The web page. Enter summary, start date, and end date. And then, click the button.

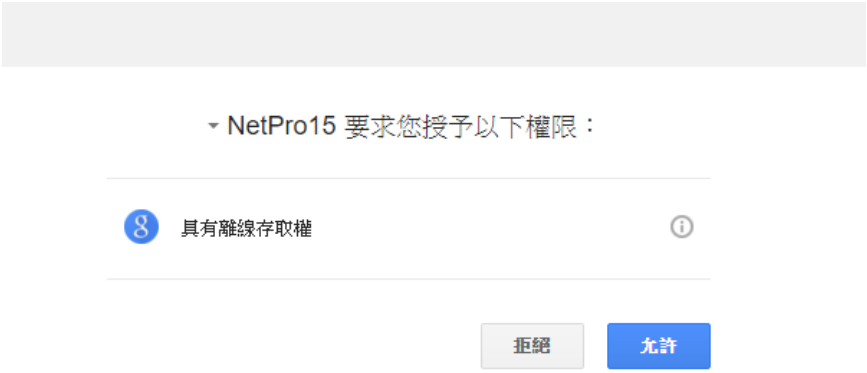


    - Step2. Show the event on google calendar.

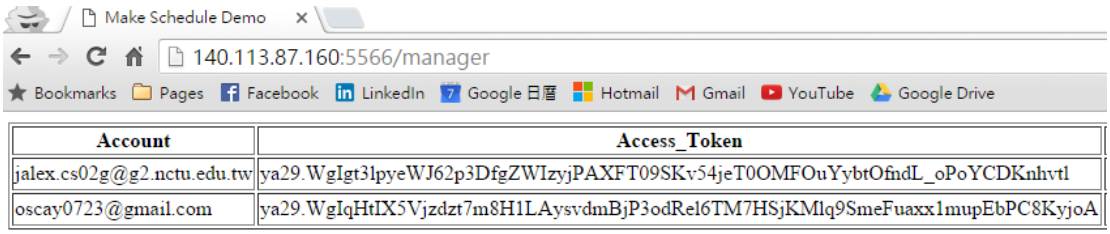


Advanced

- **Get permission of offline accessing**
  - Modifying the web page of authorization to **get the permission of offline accessing**.
  - If you do this, you don't need to show the permission of managing users' google calendars any more. Also, you would get full grades of "Authorization and authentication".
  - E.g.

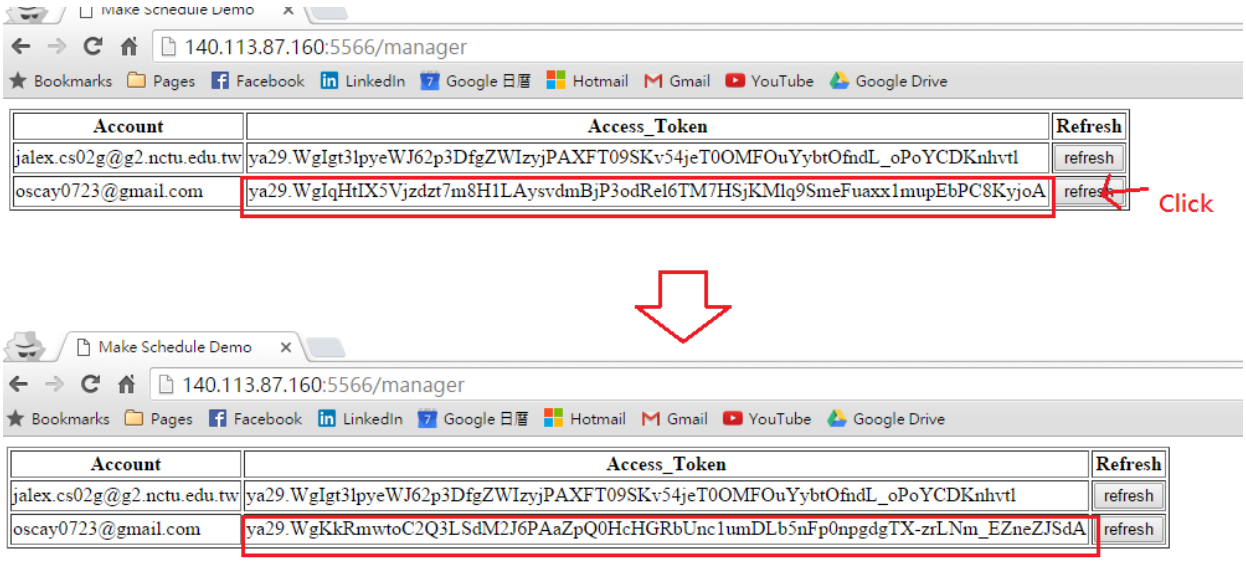


- **Manager‘s web page**
  - Add one web page and **list all authorized users’ information including users’ mail address and their access tokens**.
  - E.g.



Account	Access_Token
jalex.cs02g@g2.nctu.edu.tw	ya29.WgIgt3lpyeWJ62p3DfgZWIzyjPAXFT09SKv54jeT0OMFOuYybtOfndL_oPoYCDKnhvtl
oscay0723@gmail.com	ya29.WgIqHtIX5Vjzdzt7m8H1LAysvdmBjP3odRel6TM7HSjKMlq9SmeFuaxx1mupEbPC8KyjoA

- **Refresh access token**
  - Add a functionality to refresh users’ access tokens in manager‘s web page.
  - You would need refresh tokens to refresh users’ access tokens and refresh tokens could be only get form authorization in the permission of offline accessing.
  - E.g.



Demo

- Basic requirements. (55%)
  - Doesn’t show users’ information on URL (10%)
  - Authorization and authentication (15%)
  - Querying schedules (15%)
  - Making events (15%)
- Get permission of offline accessing (10%)

- Manager‘s web page (10%)
- Refresh access token (5%)
- Oral defense (20%)

Note

1. In demo, we would use the google account that provided by T.A.
2. You could use any programming language to write your own code.
3. You could build an http server or not. It all depends on how you design your service and we would not limit your implementation.
4. You don’t need to care about trouble shooting. We would not do any error test and just make sure that you can achieve functionalities

References

- https://developers.google.com/google-apps/calendar/overview
- https://developers.google.com/apis-explorer/#p/calendar/v3/
- https://console.developers.google.com/
- Domain Name service https://nctu.me/